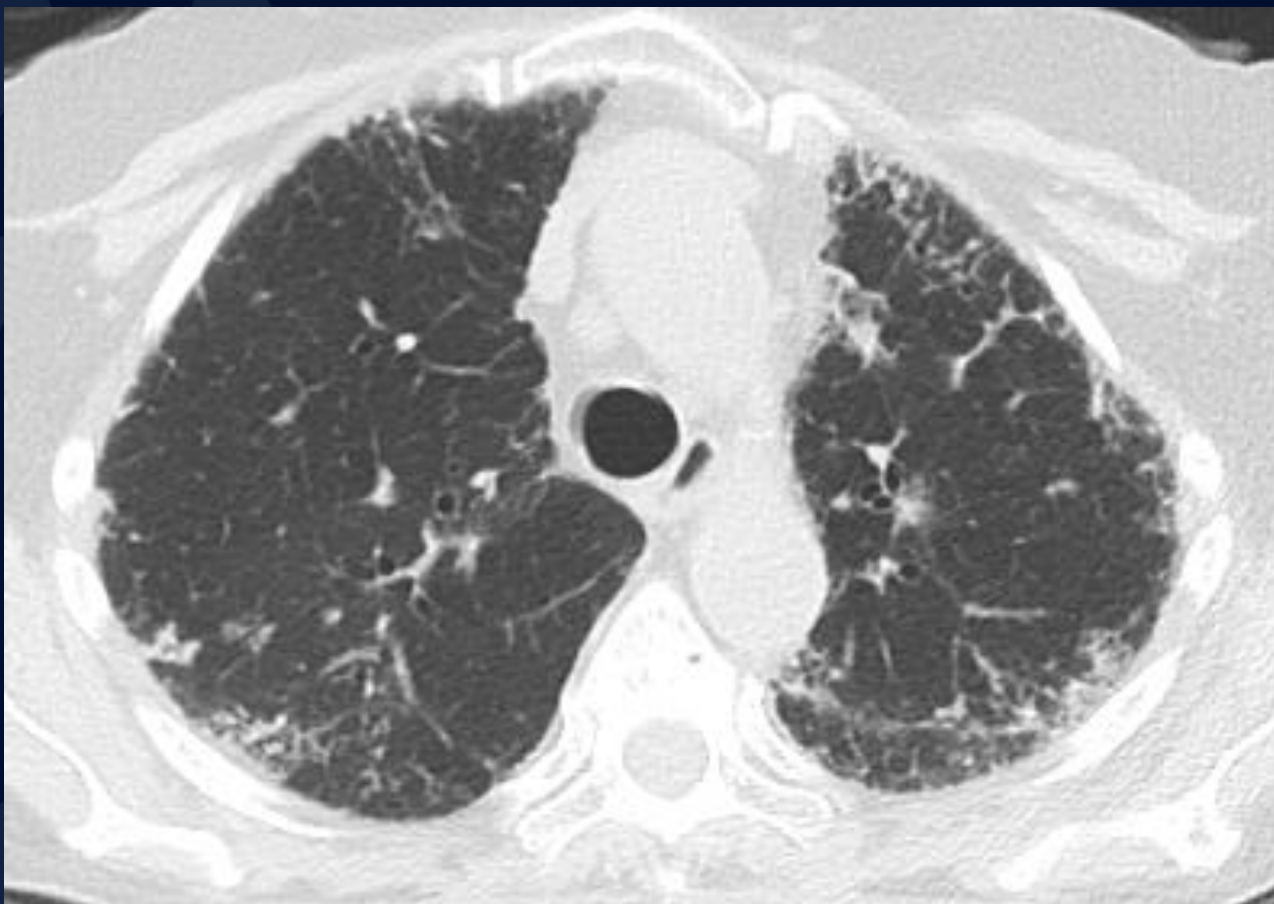


86 year old woman with shortness of breath

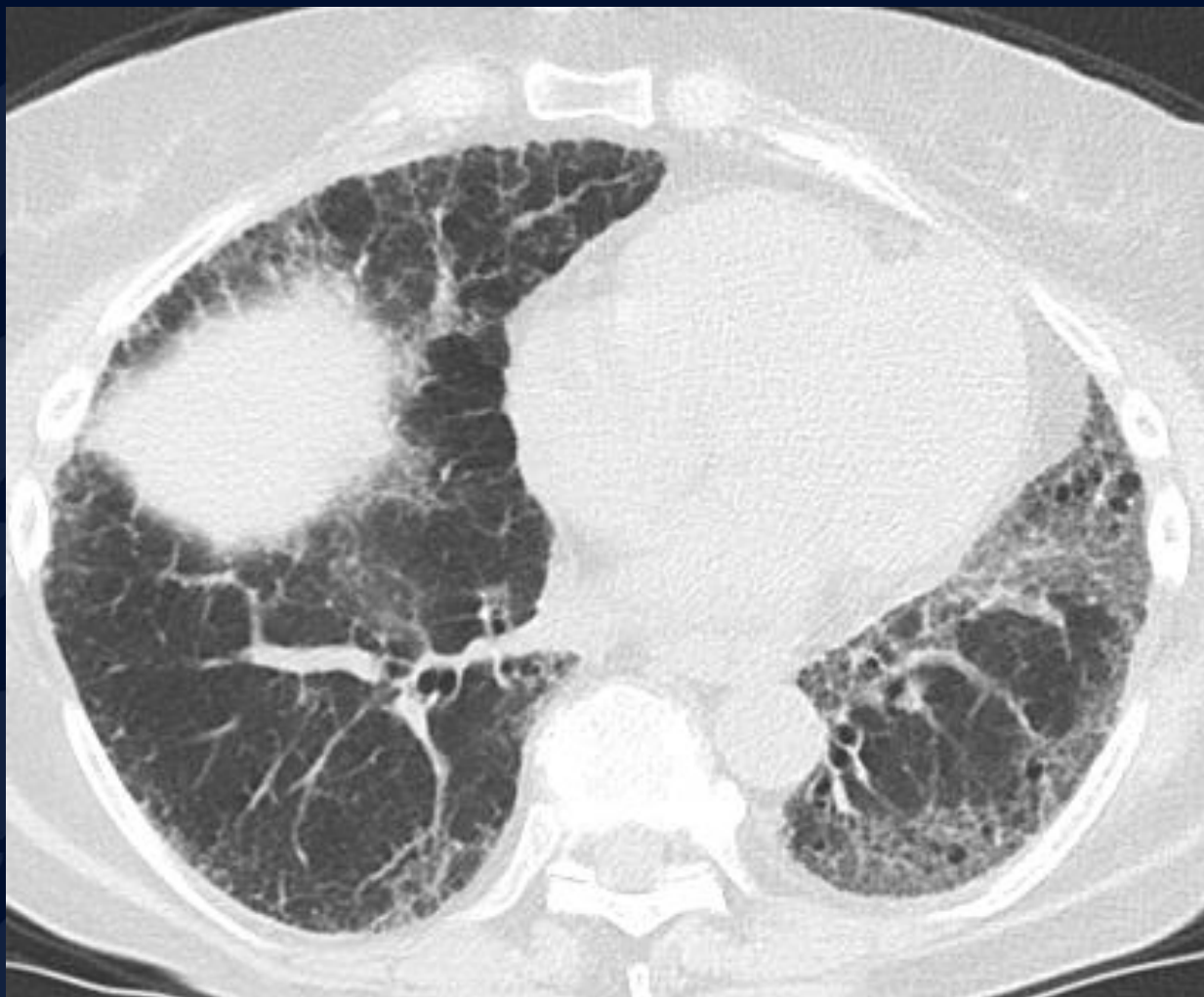
Quynh-Lan Dao, MS4

Brad Kincaid, MD

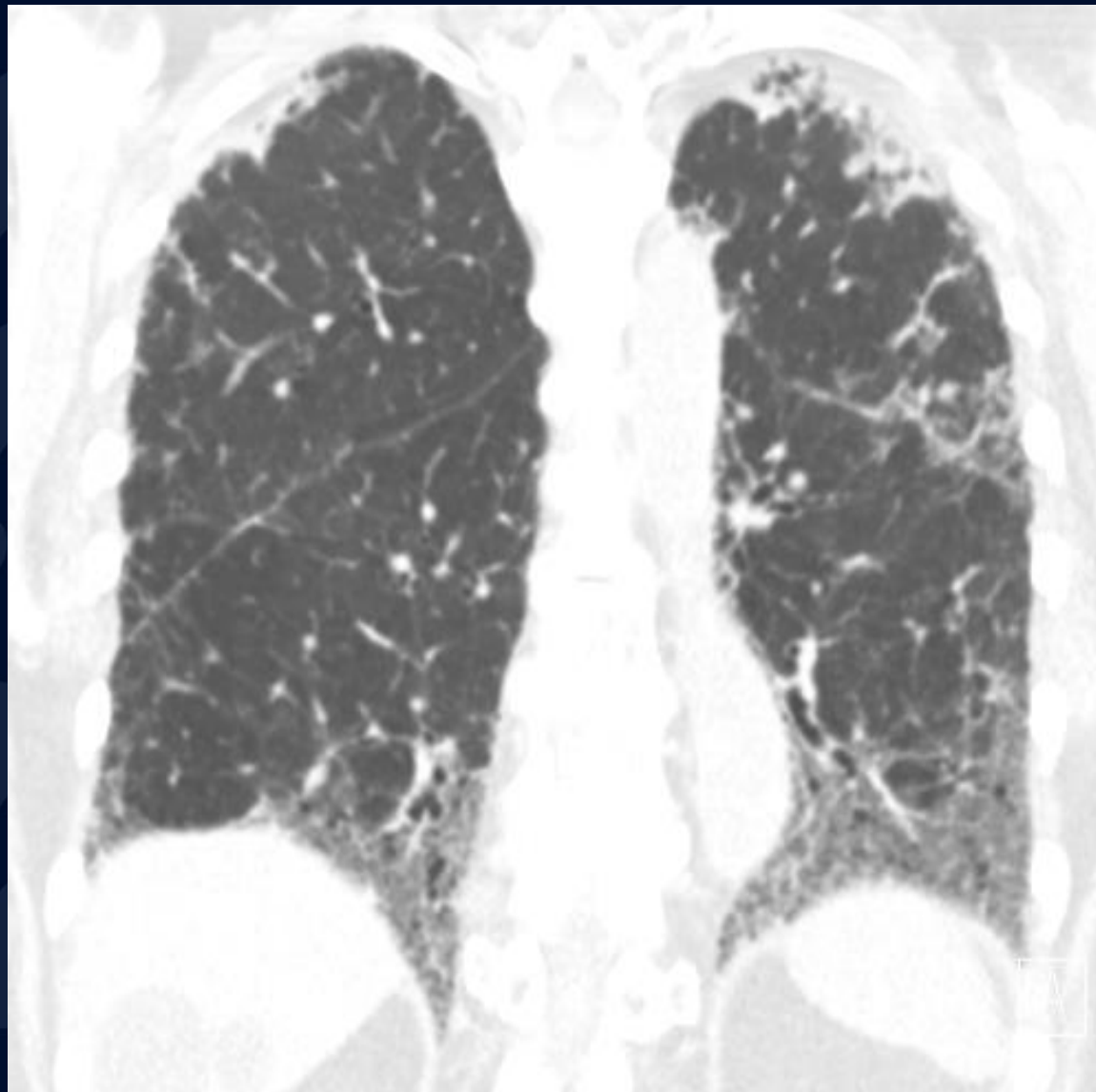
Axial
Chest CT



Axial
Chest CT



Coronal
Chest CT



A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. It features detailed vein patterns and a lobed edge.

?

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the title text.

Idiopathic Pulmonary Fibrosis

Axial
Chest CT



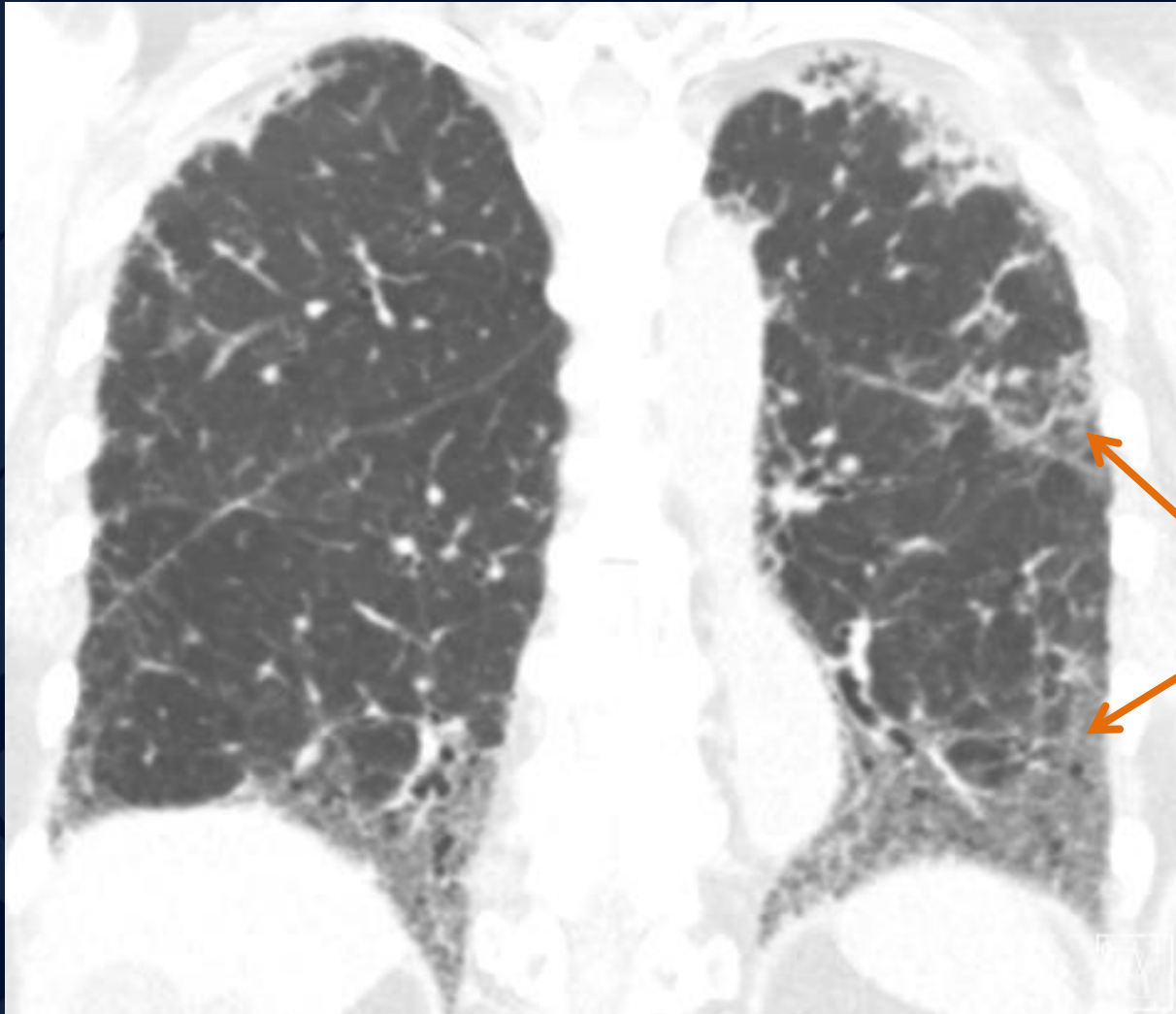
Peripheral
reticular
opacities

Axial
Chest CT



Bronchiectasis

Coronal
Chest CT



Reticular
opacities, basilar
and peripheral
predominance

Reticular opacities increasing towards the
bases (apicobasilar gradient)

Idiopathic Pulmonary Fibrosis

- Etiology unknown (by definition)
- Pathogenesis: alveolar injury & dysregulated repair
- Epidemiology:
 - Age >50, M > F. Prevalence 60 per 100,000 persons
- Presentation:
 - Chronic exertional dyspnea, chronic dry cough, fatigue
- Diagnose with high-resolution CT chest
 - Typical UIP pattern is diagnostic
 - Consider lung biopsy if HRCT isn't definitive

Idiopathic Pulmonary Fibrosis

- Typical UIP pattern on HCRT:
 - Bibasilar and peripheral reticular opacities involving the immediate subpleural lung
 - Honeycombing
 - Traction bronchiectasis
 - Craniocaudal gradient of peripheral septal thickening, bronchiectasis, and honeycombing
- Differential: Chronic hypersensitivity pneumonitis, connective tissue disease, sarcoidosis (all can have UIP pattern on CT)
- Treatment
 - Non-pharmacologic: supp O₂, pulmonary rehab, lung transplant
 - Pharmacologic: Nintedanib and pirfenidone
- Overall poor prognosis; median survival 3.8yr for those ≥65yr

References

1. Lederer DJ and Martinez FJ. Idiopathic pulmonary fibrosis. *N Engl J Med.* 2018; 378:1811-1823.
2. Torres PPTES, Rabahi MF, Moreira MAC, Meirelles GSP, Marchiori E. Usual interstitial pneumonia: typical, possible, and "inconsistent" patterns. *J Bras Pneumol.* 2017;43(5):393-398.
3. Dao, Q., Kincaid, B. Interstitial Pulmonary Fibrosis. *Radiology Online* 2020.